

4379066_Homo_sapiens-----
4379067_Homo_sapiens-----
6706209_Homo_sapiens-----
12839345_Mus_musculus-----
2350887_Entamoeba_histolytica-----
729675_Entamoeba_invadens-----
8096190_Lilium_longiflorum-----
6006737_Giardia_intestinalis-----
6165652_Leishmania_major-----
13384083_Leishmania_major-----
2143266_Leishmania_infantum-----
6165654_Leishmania_major-----
122056_Leishmania_enriettii-----
3819712_Trypanosoma_brucei-----
10613_Trypanosoma_cruzi-----
12838850_Mus_musculus-----
556610_Plasmadium_falciparum-----
4138413_Plasmodium_vivax-----
6579213_Arabidopsis_thaliana-----
70716_Bos_taurus-----
4504257_Homo_sapiens-----
4504267_Homo_sapiens-----
2119000_Mus_musculus-----
122016_Mus_musculus-----
4504259_Homo_sapiens-----
477676_Rattus_norvegicus-----
56346_Rattus_norvegicus-----
556310_Mus_musculus-----
2119001_Mus_musculus-----
13386452_Mus_musculus-----
10800140_Homo_sapiens-----
4504263_Homo_sapiens-----
4504273_Homo_sapiens-----
4504261_Homo_sapiens-----
10800138_Homo_sapiens-----
13644984_Homo_sapiens-----
11036646_Homo_sapiens-----
4504269_Homo_sapiens-----
1458147_Mus_musculus-----
3080466_Homo_sapiens-----
13645045_Homo_sapiens-----
4504275_Homo_sapiens-----
4504277_Homo_sapiens-----
12732560_Homo_sapiens-----
1458141_Mus_musculus-----
32113_Homo_sapiens-----
63456_Gallus_gallus-----
63440_Gallus_gallus-----
122049_Cairina_moschata-----
63454_Gallus_gallus-----
63450_Gallus_gallus-----
104696_Gallus_gallus-----
2696698_Gallus_gallus-----
86303_Gallus_gallus-----
86305_Gallus_gallus-----
70717_Xenopus_laevis-----
122023_Xenopus_laevis-----
422603_Xenopus_laevis-----
422604_Xenopus_laevis-----
70718_Xenopus_laevis-----
122034_Xenopus_laevis-----
204605_Rattus_norvegicus-----
57353_Rattus_norvegicus-----
1518338_Mus_musculus-----
70719_Salmo_trutta-----
122060_Oncorhynchus_mykiss-----
70720_Oncorhynchus_mykiss-----
64322_Oncorhynchus_mykiss-----
122044_Strongylocentrotus_purp-----
7439719_Strongylocentrotus_purp-----
161370_Psammechinus_miliaris-----
122043_Strongylocentrotus_purp-----
122062_Urechis_caupo-----
122059_Platynereis_dumerilii-----
70726_Patella_granatina-----
2564106_Chaetopterus_variopeda-----
4033694_Sipunculus_nudus-----
161357_Psammechinus_miliaris-----
122040_Psammechinus_miliaris-----
122057_Marthasterias_glacialis-----
122047_Asterias_rubens-----
7439713_Asterina_pectinifera-----
1870698_Psammechinus_miliaris-----
161366_Psammechinus_miliaris-----
70737_Parechinus_angulosus-----
122020_Strongylocentrotus_purp-----
122029_Parechinus_angulosus-----
122037_Parechinus_angulosus-----

729673_Lytechinus_pictus
70736_Strongylocentrotus_purpu
1346252_Holothuria_tubulosa
462238_Tigriopus_californicus
462237_Tigriopus_californicus
103049_Drosophila_hydei
122054_Drosophila_melanogaster
103048_Drosophila_hydei
14269422_Rhynchosciara_americana
6686553_Asellus_aquaticus
122051_Chironomus_thummi_thumm
283334_Anopheles_gambiae
7505381_Caenorhabditis_elegans
3879733_Caenorhabditis_elegans
6755_Caenorhabditis_elegans
7494633_Caenorhabditis_elegans
7497775_Caenorhabditis_elegans
122048_Caenorhabditis_elegans
1458314_Caenorhabditis_elegans
122030_Psammechinus_miliaris
70722_Psammechinus_miliaris
122042_Strongylocentrotus_purpu
10252_Strongylocentrotus_purpu
70723_Strongylocentrotus_purpu
122018_Psammechinus_miliaris
70721_Psammechinus_miliaris
462239_Acropora_formosa
3821328_Schizosaccharomyces_po
173405_Schizosaccharomyces_pom
6319471_Saccharomyces_cerevisi
532748_Saccharomyces_cerevisia
529959_Emericella_nidulans
122046_Emericella_nidulans
2495140_Agaricus_bisporus
4583669_Guillardia_theta
627080_Tetrahymena_pyriformis
578564_Tetrahymena_thermophila
578563_Tetrahymena_thermophila
2149888_Euplates_crassus
1708106_Chlamydomonas_reinhard
1708105_Chlamydomonas_reinhard
1708103_Chlamydomonas_reinhard
2118996_Chlamydomonas_reinhard
99439_Volvox_carteri
122039_Volvox_carteri
22323_Zea_mays
3913804_Zea_mays
22325_Zea_mays
473605_Zea_mays
122022_Triticum_aestivum
7439750_Zea_mays
13872898_Oryza_sativa
13872901_Oryza_sativa
13872940_Oryza_sativa
9663989_Oryza_sativa
13872950_Oryza_sativa
13872944_Oryza_sativa
9663991_Oryza_sativa
531056_Triticum_aestivum
1362185_Triticum_aestivum
1362186_Triticum_aestivum
1362184_Triticum_aestivum
122033_Triticum_aestivum
6682228_Arabidopsis_thaliana
11275241_Arabidopsis_thaliana
6729516_Arabidopsis_thaliana
4056497_Arabidopsis_thaliana
7635498_Cicer_arietinum
3021485_Lycopersicon_esculentu
2558962_Gossypium_hirsutum
13272409_Arabidopsis_thaliana
7439756_Lycopersicon_esculentu
7387727_Capsicum_annuum
7439753_Lycopersicon_esculentu
9757912_Arabidopsis_thaliana
7339499_Arabidopsis_thaliana
7630031_Arabidopsis_thaliana
12083300_Arabidopsis_thaliana
10177235_Arabidopsis_thaliana
1617013_Arabidopsis_thaliana
7387729_Nicotiana_tabacum
1199969_Allium_cepa
563329_Asparagus_officinalis
Consensus/80%

4379066_Homo_sapiens	-----	-----
4379067_Homo_sapiens	-----MAEASSETTSEEGQSIQEPKEANSTKA	-----QKQ-----
6706209_Homo_sapiens	PRSTTAIVWSCHLMATASAMAGPSSETTSEEQLITQEPKEANSTS	-----QKQSKQ-----
12839345_Mus_musculus	-----MAKPT-----	-----FKRQCY-----
2350887_Entamoeba_histolytica	-----DKASQKKSVATKDATKDP-----	-----KKAGDE-----
729675_Entamoeba_invadens	-----MSDKASTPKKSATKDATKPP-----	-----KKVGDE-----
8096190_Lilium_longiflorum	-----MPPRKKKAAAAAAAAGAA-----	-----GKAAAG-----
6006737_Giardia_intestinalis	-----MSKVET-----	-----KRLMKK-----
6165652_Leishmania_major	-----MASSR-----KAS-----	-----NP-----
13384083_Leishmania_major	-----MASSRSASRKAS-----	-----NP-----
2143266_Leishmania_infantum	-----MASSRSAPRKAS-----	-----HA-----
6165654_Leishmania_major	-----MATHRPSSKPP-----	-----HS-----
122056_Leishmania_enriettii	-----MASQRLAPRKSS-----	-----AA-----
3819712_Trypanosoma_brucei	-----MATPKSTPAKTR-----	-----KEA-----
10613_Trypanosoma_cruzi	-----MATPKSSANRK-----	-----KGG-----
12838850_Mus_musculus	-----QEAKAKPEKKPKKKPEKEKEPGEKLEKKPKDKREKAKPKKKPEQEN-----	-----REQETP-----
556610_Plasmadium_falciparum	-----SLPVGENVTVKIPVDDRDESSPQPPETPVEVRDEPSPQPPETPAS-----	-----KSEGTL-----
4138413_Plasmodium_vivax	-----PEP-----AKSA ^D PA-----	-----PRKGSK-----
6579213_Arabidopsis_thaliana	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
70716_Bos_taurus	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
4504257_Homo_sapiens	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
4504267_Homo_sapiens	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
2119000_Mus_musculus	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
122016_Mus_musculus	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
4504259_Homo_sapiens	-----MPEL-----AKSA ^D PA-----	-----PRKGSK-----
477676_Rattus_norvegicus	-----PEP-----AKSRPA-----	-----PKKGSK-----
56346_Rattus_norvegicus	-----MPEP-----AKSRPA-----	-----PKKGSK-----
556310_Mus_musculus	-----VRSVP-----	-----PKKGSK-----
2119001_Mus_musculus	-----MPEP-----SKSAPA-----	-----PKKGSK-----
13386452_Mus_musculus	-----MPEP-----SRSTPA-----	-----PKKGSK-----
10800140_Homo_sapiens	-----MPEP-----SKSAPA-----	-----PKKGSK-----
4504263_Homo_sapiens	-----MPEP-----VKSAPV-----	-----PKKGSK-----
4504273_Homo_sapiens	-----MPEP-----SKSAPA-----	-----PKKGSK-----
4504261_Homo_sapiens	-----MPEP-----SKSAPA-----	-----PKKGSK-----
10800138_Homo_sapiens	-----MPEP-----TKSAPA-----	-----PKKGSK-----
13644984_Homo_sapiens	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
11036646_Homo_sapiens	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
4504269_Homo_sapiens	-----MPDP-----AKSA ^D PA-----	-----PRKGSK-----
1458147_Mus_musculus	-----MPDP-----AKSA ^D PA-----	-----PRKGSK-----
3080466_Homo_sapiens	-----PDP-----AKSA ^D PA-----	-----PRKGSK-----
13645045_Homo_sapiens	-----MPDP-----AKSA ^D PA-----	-----PRKGSK-----
4504275_Homo_sapiens	-----MPDP-----AKSA ^D PA-----	-----PRKGSK-----
4504277_Homo_sapiens	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
12732560_Homo_sapiens	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
1458141_Mus_musculus	-----MPEL-----AKSA ^D PA-----	-----PRKGSK-----
32113_Homo_sapiens	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
63456_Gallus_gallus	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
63440_Gallus_gallus	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
122049_Cairina_moschata	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
63454_Gallus_gallus	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
63450_Gallus_gallus	-----MPEP-----AKSA ^D PA-----	-----PKKASK-----
104696_Gallus_gallus	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
2696698_Gallus_gallus	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
86303_Gallus_gallus	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
86305_Gallus_gallus	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
70717_Xenopus_laevis	-----PEP-----AKSA ^D PA-----	-----PRKGSK-----
122023_Xenopus_laevis	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
422603_Xenopus_laevis	-----MPDP-----AKSA ^D PA-----	-----AKKGSK-----
422604_Xenopus_laevis	-----MSDP-----AKSA ^D PA-----	-----AKKGSK-----
70718_Xenopus_laevis	-----PEP-----AKSA ^D PA-----	-----PRKGSK-----
122034_Xenopus_laevis	-----MPEP-----AKSA ^D PA-----	-----PRKGSK-----
204605_Rattus_norvegicus	-----MPEVS-----AKGT ^I -----	-----SKKGFK-----
57353_Rattus_norvegicus	-----MPEVS-----AKGT ^I -----	-----SKKGFK-----
1518338_Mus_musculus	-----MPEVA-----VKGA ^I -----	-----SKKGFK-----
70719_Salmo_trutta	-----PEP-----AKSA ^D PA-----	-----KKGSK-----
122060_Oncorhynchus_mykiss	-----MPEP-----AKSA ^D PA-----	-----KKGSK-----
70720_Oncorhynchus_mykiss	-----PEP-----AKSA ^D PA-----	-----KKGSK-----
64322_Oncorhynchus_mykiss	-----MPEP-----AKSA ^D PA-----	-----KKGSK-----
122044_Strongylocentrotus_purp	-----MP-----AKAQAA-----	-----GKKGSK-----
7439719_Strongylocentrotus_purp	-----MP-----AKAQAA-----	-----GKKGSK-----
161370_Psammechinus_miliaris	-----MP-----AKAQAA-----	-----GKKGSK-----
122043_Strongylocentrotus_purp	-----MP-----AKAQPA-----	-----GKKGSK-----
122062_Urechis_caupo	-----MPPKA-----ASKG ^A -----	-----KKAAS-----
122059_Platynereis_dumerilii	-----MPPKV-----ASKG ^A -----	-----KKAAS-----
70726_Patella_granatina	-----PPKV-----SSKG ^A -----	-----KKAG-----
2564106_Chaetopterus_variopeda	-----MPPKV-----SSKG ^A -----	-----KKAVS-----
4033694_Sipunculus_nudus	-----MPPKP-----SAKG ^A -----	-----KKAAS-----
161357_Psammechinus_miliaris	-----MPAKQ-----TSGK ^A -----	-----KK-----
122040_Psammechinus_miliaris	-----MPAKQ-----TSGK ^A -----	-----KK-----
122057_Marthasterias_glacialis	-----PPKP-----SGK ^A Q-----	-----KK-----
122047_Asterias_rubens	-----PPKP-----SGK ^A Q-----	-----KK-----
7439713_Asterina_pectinifera	-----PPKP-----SGK ^A Q-----	-----KK-----
1870698_Psammechinus_miliaris	-----MPAKG-----AATK ^E -----	-----KKQAV-----
161366_Psammechinus_miliaris	-----MPSQR-----SPTKRS-----	-----PTKRSP-----
70737_Parechinus_angulosus	-----PSQKSPTKR-----SPTKRS-----	-----PTKRSP-----
122020_Strongylocentrotus_purp	-----MPSQR-----SPTKRS-----	-----PTKRSP-----
122029_Parechinus_angulosus	-----PRSPAKT-----SPRKES-----	-----PRKGSP-----
122037_Parechinus_angulosus	-----PRSPAKT-----SPRKES-----	-----PRKGSPRKGS-----

729673_Lytechinus_pictus	-----MPPRSPSKS--SPRKGS-----PRKGSP
70736_Strongylocentrotus_purpu	-----MPRSSPSKT--SPRKGS-----PRGRSPS
1346251_Holothuria_tubulosa	-----MAPK--APGKGA-----KK
462238_Tigriopus_californicus	-----MPPKV--SGKAA-----KK
462237_Tigriopus_californicus	-----MPPKV--SGKAA-----KK
103049_Drosophila_hydei	-----MPPKT--SGKAA-----KK
122054_Drosophila_melanogaster	-----MPPKT--SGKAA-----KK
103048_Drosophila_hydei	-----MPPKT--SGKAA-----KK
14269422_Rhynchosciara_america	-----MPPKT--SGKAA-----KK
6686553_Asellus_aquaticus	-----MAPKT--SGKAA-----KK
122051_Chironomus_thunmi_thunmm	-----MAPPKT--SGKAA-----KK
2833334_Anopheles_gambiae	-----MAPPKT--SGKAA-----KK
7505381_Caenorhabditis_elegans	-----MAPPK--PSAKGA-----KK
3879733_Caenorhabditis_elegans	-----MAINPFFTLVQRPVQSIEMAPPK--PSA K GA-----KK
6755_Caenorhabditis_elegans	-----MAPPK--PSA K GA-----KK
7494633_Caenorhabditis_elegans	-----MPPK--PSA K GA-----KK
4797775_Caenorhabditis_elegans	-----MAPPK--PSA K GA-----KK
122048_Caenorhabditis_elegans	-----MAPPK--PSA K GA-----KK
1458314_Caenorhabditis_elegans	-----MFNLK-MFLRCF-----KY
122030_Psammecchinus_miliaris	-----MAPTAQ--VAK K GS-----KA V KA
70722_Psammecchinus_miliaris	-----APTAQ--VAK K GS-----KA V KA
122042_Strongylocentrotus_purpu	-----MAPTAQ--VAK K GS-----KA V GK
10252_Strongylocentrotus_purpu	-----MAPTAQ--VAK K GS-----KA V GK
70723_Strongylocentrotus_purpu	-----APTAQ--VAK K GS-----KA V GK
122018_Psammecchinus_miliaris	-----MAPTGQ--VAK K GS-----KA V KP
70721_Psammecchinus_miliaris	-----APTGG--VAK K GS-----KA V KP
462239_Acropora_formosa	-----MAPKVR--AA K KE-----KA V GAK
3821328_Schizosaccharomyces_po	-----MS--AAE K KP-----ASKAP
173405_Schizosaccharomyces_pom	-----MS--AAE K KP-----ASKAP
6319471_Saccharomyces_cerevisi	-----MSS--AAE K KP-----ASKAP
532748_Saccharomyces_cerevisia	-----MSA--KAE K KP-----ASKAP
529959_Emericella_nidulans	-----MPPK--AAE K KPST-----GGKAPAGKAP
122046_Emericella_nidulans	-----MPPK--AAE K KPST-----GGKAPAGKAP
2495140_Agaricus_bisporus	-----MAPKPASTAG K APAS-----TASKAPVK
4583669_Guillardia_theta	-----
627080_Tetrahymena_pyrimiformis	-----APK--AP A A-----
578564_Tetrahymena_thermophila	-----MAPKK--AP A TT-----
578563_Tetrahymena_thermophila	-----MAPKK--AP A AA-----
2149888_Euplates_crassus	-----MPATP-----
1708106_Chlamydomonas_reinhard	-----MAPK-KDEKPA---TAEAGAEAPAKAEAKPKA E KA AK KK--AKKEPS-----K AA KE
1708105_Chlamydomonas_reinhard	-----MAPK-KDEKPA---TAEAGAEAPAKAEAKPKA E KGK--AKKE P A-----K AA KE
1708103_Chlamydomonas_reinhard	-----MAPK-KDEKPP---TOEAGAEAPAKAE R KPK E KA AK KK--AKKEPS-----K AA KE
2118996_Chlamydomonas_reinhard	-----MAPK-KDEKPATRAATQEAGVEATA E AKPK E KA AK KK--AKKE P A-----K AA KE
99439_Volvox_carteri	-----MAPKTKEEKPA---SEAVEP---KAEAKPK E AKPK E KK E KA P A-----K K S AK E
122039_Volvox_carteri	-----MAPK-KEEKPA---SQAAEAEPEVK E AKPK E AKV E AKPK E KK E KA P A-----K V AKE
22232_Zea_mays	-----MAPKAEKKPAAKKPA E AA E EEPAT-----EKVEKAPAGK K PK E AKR L PAG
3913804_Zea_mays	-----MAPKADKKPAAKKPA E EEPAT-----EKA E KAPAGK K PK E AKR L PAG
22325_Zea_mays	-----MAPKAEKKPAAKKPA E EEPAT-----EKA E KAPAGK K PK E AKR L PAG
473605_Zea_mays	-----MAPKAEKKPAAKKPA E EEPAT-----EKA E KAPAGK K PK E AKR L PAG
122022_Triticum_aestivum	-----MAPKAEKKPA E AKK P TEE K AE-----KKP E RAE K R V P
7439750_Zea_mays	-----MAPKAEKKPAAKKPA E EEPAT-----EKA E KAPAGK K PK E AKR L PAG
13872898_Oryza_sativa	-----MAPKAEKKPAAKKPA E EEPAT-----EKA E KAPAGK K PK E AKR L PAG
13872901_Oryza_sativa	-----MAPKAEKKPAAKKPA E EEPAT-----EKA E KAPAGK K PK E AKR L PAG
13872940_Oryza_sativa	-----MAPKAEKKPAAKKPA E EEPAT-----EKA E KALAG K PK E AKR L PAG
9663989_Oryza_sativa	-----MAPKAEKKPAAKKPA E EEPAT-----EKA E KAPAGK K PK E AKR L PAG
13872950_Oryza_sativa	-----MAPKAEKKPAAKKPA E EEPAT-----EKA E KAPAGK K PK E AKR L PAG
13872944_Oryza_sativa	-----MAPKAEKKPAAKKPA E EEPAT-----EKA E KAPAGK K PK E AKR L PAG
9663991_Oryza_sativa	-----MAPKAEKKPAAKKPA E EEPAT-----EKA E KAPAGK K PK E AKR L PAG
531056_Triticum_aestivum	-----MAPKAEKKPA E AKK P VET E KK-----PK E AKR V P
1362185_Triticum_aestivum	-----MAPKAEKK-----
1362186_Triticum_aestivum	-----MAPKAA E K--K P VE E KT P AV K -----K P KA E KK V P
1362184_Triticum_aestivum	-----MAPKAEKKPVA E AK E KT A AK-----K T KA E KK R P
122033_Triticum_aestivum	-----PBK P AA E N V KE E AK E TT A G-----K K PK E AKR L PAG
6682228_Arabidopsis_thaliana	-----MAPK--AE K PSEK-----AP A D K K
11275241_Arabidopsis_thaliana	-----MAPK--AE K P E K-----AP A KA E KK
6729516_Arabidopsis_thaliana	-----MAPKA--AE K P G K P -AE K PA E AKLP-----K A E K K
4056497_Arabidopsis_thaliana	-----MAPKA--AE K P E KK-----AG K PA E AKLP-----K A E K K
7635498_Cicer_arietinum	-----MAPAK--AE K P E KKPA E AKPA E AK K P-----K A E K K
3021485_Lycopersicon_esculentu	-----KPAEKKPA-----EKT P VAE-K P APAE E KK-----K A G K KL
2558962_Gossypium_hirsutum	-----MAPK--AE K PA E KKPA E -----EKK V AAE-K P APAE E KK-----K A G K KL
13272409_Arabidopsis_thaliana	-----MAPK--AG K PA E KKPA E KA P AA E EE V KA E -K P APAE E KK-----K A G K KL
7439756_Lycopersicon_esculentu	-----MAPK--AG K PA E KK-----PVE E K-KAE-EV P AE E KK-----K A G K KL
7387727_Capsicum_annuum	-----MAPKAA G K P AE E KK-----PVE E K-KAE-EV P AE E KK-----K A G K KL
7439753_Lycopersicon_esculentu	-----APK--AE K PA E KK-----PA E EK-K-----AE F TP-----K A G K KL
9757912_Arabidopsis_thaliana	-----MAPK--AE K PA E KKP A SE P K V EE K S K AE-K P APAE E KK-----K A G K KL
7339499_Arabidopsis_thaliana	-----MAPR--AE K PA E KKPA E AA E PK V EE K S K AE-K P APAE E KK-----K A G K KL
7630031_Arabidopsis_thaliana	-----MAPK--AE K PA E KK-----PVE E KS K AE-K P APAE E KK-----K A G K KL
12083300_Arabidopsis_thaliana	-----MAPR--AE K PA E KK T AA E RP V EE K S K AE-K P APAE E KK-----K A G K KL
10177235_Arabidopsis_thaliana	-----MAK--AD K PA E KK-----PA E KT P AA E PA E KK-----K A G K KL
1617013_Arabidopsis_thaliana	-----MAPR--AD K PA E KK-----GA E KT P VAE-K P APAE E KK-----K A G K KL
7387729_Nicotiana_tabacum	-----KKPAEKKPA E AKP D E P EE K PA E KK-----AE K KLPAK-----K A E K LPS K E
1199969_Allium_cepa	-----KKPAEKKPA E AKP D E P EE K PA E KK-----AE K KLPAK-----K A E K LPS K E
5633329_Asparagus_officinalis	-----KKPAEKKPA E AKP D E P EE K PA E KK-----AE K KLPAK-----K A E K LPS K E
Consensus/80%	-----...hs...+...

4379066_Homo_sapiens -----LRGSSRRRHANSGGDI-----FGD-SPAAYFPVVLKOVHQALSLSQEA
 4379067_Homo_sapiens -----KRRGCRGSRRRHNKRGDS-----FGD-SFTPYFPVVLKOVHQGLSLSQEA
 6706209_Homo_sapiens -----RKRGHRHGPRRCHSNCRGD-----SFATYFPRVVLKOVHQGLSLSRREA
 12839345_Mus_musculus -----IKRLRPLYLKRKHRSRSSIN-----LGHNYSLYINVVKRIVVFNKGISSSY
 2350887_Entamoeba_histolytica -----E-----KMTMLK-----KNFESVALYIISVVLKSVFQDIGITLPS
 729675_Entamoeba_invadens -----EA-----KEREVK-----KNFDSEALYIISVVLKSVFDPDIGITLPS
 8096190_Lilium_longiflorum -----KDGAGIMTPKKPKKGKKG-----IPLMKTRVYIIRVLTQVPELCISSSKS
 6006737_Giardia_intestinalis -----TEAGDKGDAKRKHRSKETY-----AIVYKVLRSENIRSADTDLGISNSKG
 6165652_Leishmania_major -----HHSRK-----PKRSNNVVVGSLSKAIINAQMMSHHT
 13384083_Leishmania_major -----HHSRK-----PKRSNNVVVGSLSKAIINAQMMSHHT
 2143266_Leishmania_infantum -----HHSRK-----PKRSNNVVVGSLSKAIINAQMMSHHT
 6165654_Leishmania_major -----HHSRK-----PKRSNNVVVGSLSKAIINAQMMSHHT
 122056_Leishmania_enriettii -----HHSRK-----PKRSNNVVVGSLSKAIINSHMSMSGHT
 3819712_Trypanosoma_brucei -----KEITR-----QATNNVVVSLSRQINSQMSMTSET
 10613_Trypanosoma_cruzi -----KEISRK-----PKRTNNVVVNSLSKSTNNHMSMSGHT
 12838850_Mus_musculus -----EQEPEVQRRRSLHQSSIREDERARLIRRKNSPAAIYFPVVLKIVHGLSLSQKS
 556610_Plasmadium_falciparum -----AKAKTGTGDP-DGKCKRKKS-----YDSVCLYIIVVVLKOVHPDTGISSKA
 4138413_Plasmodium_vivax -----AKAKATGATDGKCKRKKS-----YDSVCLYIIVVVLKOVHPDTGISSKA
 6579213_Arabidopsis_thaliana -----KKTCKVEKKQENKKKKKKKKR-----LAGDEYRRYYVVMKOVHPDLGITSKA
 70716_Bos_taurus -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 4504257_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 4504267_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 2119000_Mus_musculus -----KALTAKQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 122016_Mus_musculus -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 4504259_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 477676_Rattus_norvegicus -----AVTKAQKKGDKERKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 56346_Rattus_norvegicus -----AVTKAQKKGDKERKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 556310_Mus_musculus -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 2119001_Mus_musculus -----KAIASKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 13386452_Mus_musculus -----KAITKAQKKGDKKKRKR-----GRKESYSIYVIVVLKOVHPDTGISSKA
 10800140_Homo_sapiens -----KAITKAQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 4504263_Homo_sapiens -----KAINKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 4504273_Homo_sapiens -----AVTKAQKKGDKKKRKR-----TRKESYSVYVIVVLKOVHPDTGISSKA
 4504261_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 10800138_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 13644984_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 11036646_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 4504269_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 1458147_Mus_musculus -----AVTKAQKKGDKKKRKR-----SRKESYSVYVIVVLKOVHPDTGISSKA
 3080466_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 13645045_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 4504275_Homo_sapiens -----AVTKAQKKGDKERKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 4504277_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 12732560_Homo_sapiens -----AVTKAQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 1458141_Mus_musculus -----AVTKAQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 32113_Homo_sapiens -----AVTKAQKKGDKS-AA-----HRKESYSIYVIVVLKOVHPDTGISSKA
 63456_Gallus_gallus -----AVTKTQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 63440_Gallus_gallus -----AVTKTQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 122049_Cairina_moschata -----AVTKTQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 63454_Gallus_gallus -----AVTKTQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 63450_Gallus_gallus -----AVTKTQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 104696_Gallus_gallus -----AVTKTQKKGDKKKRKR-----TRKESYSIYVIVVLKOVHPDTGISSKA
 2696698_Gallus_gallus -----AVTKTQKKGDKKKRKR-----TRKESYSIYVIVVLKOVHPDTGISSKA
 86303_Gallus_gallus -----AVTKTQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 86305_Gallus_gallus -----AVTKTQKKGDKKKRKR-----SRKESYSIYVIVVLKOVHPDTGISSKA
 70717_Xenopus_laevis -----AVTKTQKKGDKKKRKR-----SRKESYAIYVIVVLKOVHPDTGISSKA
 122023_Xenopus_laevis -----AVTKTQKKGDKKKRKR-----SRKESYAIYVIVVLKOVHPDTGISSKA
 422603_Xenopus_laevis -----AVTKTQKKGDKKKRKR-----SRKESYAIYVIVVLKOVHPDTGISSKA
 422604_Xenopus_laevis -----AVTKTQKKGDKKKRKR-----SRKESYAIYVIVVLKOVHPDTGISSKA
 70718_Xenopus_laevis -----AVTKTPKDKGKKRKR-----SRKESYAIYVIVVMKOVHPDTGISSKA
 122034_Xenopus_laevis -----AVTKTPKDKGKKRKR-----SRKESYAIYVIVVMKOVHPDTGISSKA
 204605_Rattus_norvegicus -----AVTKTQKKEGRKKRKR-----CREESYSIYVIVVLKOVHPDTGISSKA
 57353_Rattus_norvegicus -----AVTKTQKKEGRKKRKR-----CRKESYSIYVIVVLKOVHPDTGISSKA
 1518338_Mus_musculus -----AVTKTQKKEGRKKRKR-----CRKESYSIYVIVVLKOVHPDTGISSKA
 70719_Salmo_trutta -----AVTKTAGGGKKRKR-----SRKESYAIYVIVVLKOVHPDTGISSKA
 122060_Oncorhynchus_mykiss -----AVTKTAGGGKKRKR-----SRKESYAIYVIVVLKOVHPDTGISSKA
 70720_Oncorhynchus_mykiss -----AVTKTAGGGKKRKR-----SRKESYAIYVIVVLKOVHPDTGISSKA
 64322_Oncorhynchus_mykiss -----AVTKTAGGGKKRKR-----SRKESYAIYVIVVLKOVHPDTGISSKA
 122044_Strongylocentrotus_purp -----AKAPKPS-GDKKKRRR-----KRKESYCIIYIVVVLKOVHPDTGISSKA
 7439719_Strongylocentrotus_purp -----AKAPKPS-GDKKKRRR-----KRKESYCIIYIVVVLKOVHPDTGISSKA
 161370_Psammechinus_miliaris -----AKAPRPS-GDKKKRRR-----KRKESYCIIYIVVVLKOVHPDTGISSKA
 122043_Strongylocentrotus_purp -----AKAPRPS-GGKKRRR-----KRKESYCIIYIVVVLKOVHPDTGISSKA
 122062_Urechis_caupo -----AKAARS-TDKKKR-----RRRESYSIYIVVVLKOVHPDTGISSKA
 122059_Platynereis_dumerilii -----AKAARS-GEKKKKR-----RRRESYSIYIVVVLKOVHPDTGISSKA
 70726_Patella_granatina -----AKAARS-GDKKKR-----RRRESYSIYIVVVLKOVHPDTGCVSSKA
 2564106_Chaetopterus_variopeda -----SKAPRPS-GDKKKRRR-----KRKESYSIYVIVVMKOVHPDTGISSKA
 4033694_Sipunculus_nudus -----AKAART-GDKKKR-----RRKESYSIYIVVVLKOVHPDTGISSKA
 161357_Psammechinus_miliaris -----AGAKGRPAGASKTERR-----KRKESYCIIYIVVVLKOVHPDTGISSKA
 122040_Psammechinus_miliaris -----AGAKGRPAGASKTERR-----KRKESYCIIYIVVVLKOVHPDTGISSKA
 122057_Marthasterias_glacialis -----AGAKGAPR-TDKKKR-----KRKESYCIIYIVVVLKOVHPDTGISSKA
 122047_Asterias_rubens -----AGAKGAPR-TDKKKR-----KRKESYCIIYIVVVLKOVHPDTGISSKA
 7439713_Asterina_pectinifera -----AGAKGAPS-TNKKKR-----KRKESYCIIYIVVVLKOVHPDTGISSKA
 1870698_Psammechinus_miliaris -----KSKAMASSRTGDKKKR-----RRLESYNIYIVVVLKOVHPDTGISSKA
 161366_Psammechinus_miliaris -----QKG-GKG-----AKRGAGKRRGVAV-----REKESYCIYIVVVLKOVHPDTGISSRA
 70737_Parechinus_angulosus -----QKG-GKGKGKGAKG-----AKRGKGQVVKR-----REKESYCIYIVVVLKOVHPDTGISSRA
 122020_Strongylocentrotus_purp -----QKGA-GKGKGKGSKRGA-----RRRGGAAVRRR-----REKESYCIYIVVVLKOVHPDTGISSRG
 122029_Parechinus_angulosus -----SRKASPKRGKGKAKRAG-----GGRRRR--VVKRRR-----REKESYCIYIVVVLKOVHPDTGISSRA
 122037_Parechinus_angulosus -----PSRKASPKRGKGKAKRAG-----GGRRRR--VVKRRR-----REKESYCIYIVVVLKOVHPDTGISSRA

729673_Lytechinus_pictus
 70736_Strongylocentrotus_purpu
 1346252_Holothuria_tubulosa
 462238_Tigriopus_californicus
 462237_Tigriopus_californicus
 103049_Drosophila_hydei
 122054_Drosophila_melanogaster
 103048_Drosophila_hydei
 14269422_Rhynchosciara_america
 6686553_Asellus_aquaticus
 122051_Chiromonus_thunmi_thunmm
 2833334_Anopheles_gambiae
 7505381_Caenorhabditis_elegans
 3879733_Caenorhabditis_elegans
 6755_Caenorhabditis_elegans
 7494633_Caenorhabditis_elegans
 7497775_Caenorhabditis_elegans
 122048_Caenorhabditis_elegans
 1458314_Caenorhabditis_elegans
 122030_Psammecinus_miliaris
 70722_Psammecinus_miliaris
 122042_Strongylocentrotus_purpu
 10252_Strongylocentrotus_purpu
 70723_Strongylocentrotus_purpu
 122018_Psammecinus_miliaris
 70721_Psammecinus_miliaris
 462239_Acropora_formosa
 3821328_Schizosaccharomyces_po
 173405_Schizosaccharomyces_pom
 6319471_Saccharomyces_cerevisi
 532748_Saccharomyces_cerevisia
 529959_Emericella_nidulans
 122046_Emericella_nidulans
 2495140_Agaricus_bisporus
 4583669_Guillardia_theta
 627080_Tetrahymena_pyrimorfis
 578564_Tetrahymena_thermophila
 578563_Tetrahymena_thermophila
 2149888_Euplates_crassus
 1708106_Chlamydomonas_reinhard
 1708105_Chlamydomonas_reinhard
 1708103_Chlamydomonas_reinhard
 2118996_Chlamydomonas_reinhard
 99439_Volvox_carteri
 122039_Volvox_carteri
 22323_Zea_mays
 3913804_Zea_mays
 22325_Zea_mays
 473605_Zea_mays
 122022_Triticum_aestivum
 7439750_Zea_mays
 13872898_Oryza_sativa
 13872901_Oryza_sativa
 13872940_Oryza_sativa
 9663989_Oryza_sativa
 13872950_Oryza_sativa
 13872944_Oryza_sativa
 9663991_Oryza_sativa
 531056_Triticum_aestivum
 1362185_Triticum_aestivum
 1362186_Triticum_aestivum
 1362184_Triticum_aestivum
 122033_Triticum_aestivum
 6682228_Arabidopsis_thaliana
 11275241_Arabidopsis_thaliana
 6729516_Arabidopsis_thaliana
 4056497_Arabidopsis_thaliana
 7635498_Cicer_arietinum
 3021485_Lycopersicon_esculentu
 2558962_Gossypium_hirsutum
 13272409_Arabidopsis_thaliana
 7439756_Lycopersicon_esculentu
 7387727_Capsicum_annuum
 7439753_Lycopersicon_esculentu
 9757912_Arabidopsis_thaliana
 7339499_Arabidopsis_thaliana
 7630031_Arabidopsis_thaliana
 12083300_Arabidopsis_thaliana
 10177235_Arabidopsis_thaliana
 1617013_Arabidopsis_thaliana
 7387729_Nicotiana_tabacum
 1199969_Allium_cepa
 563329_Asparagus_officinalis
 Consensus/80%

4379066_Homo_sapiens VSVMDMSMVRDILDRATEAGHIAAEYSKCVTITSRDIERMAVCLLLPCKMGHLAESQCTNATLRYTKSK---
 4379067_Homo_sapiens VSVMDSMIDILDRATEAEQLAAYTKRVIITSRDIOMAVRLLLPGKMRKLAESQGTAALRYYTKSK---
 6706209_Homo_sapiens VSVMDSLVDILDRATEACRRLARSTKQRITITAWBTRMAVBLLLPGQMGKLAESGGTKAVLRYYTKSKAP
 12839345_Mus_musculus 12839345_Mus_musculus VDIMPILINDIFERIATEACQOMFLRKRTCLTPGRIQQAIVLLEKKLTLAVTFGSKAVHRSIHS---
 2350887_Entamoeba_histolytica ISIMDSFVRDIFERIATEASLARNNYKNTITITVKBEIETATKLILKGDLNKHAVLEGQSAVKRAVSRSSS-
 729675_Entamoeba_invadens ISIMDSFVRDIFERIAMADASLTENNYQKSTLTTKEIETATKLILKGDLNKHAVLEGQSAVKRAQCOPTS-
 8096190_Lilium_longiflorum MLIMRNFFVHNQNIAKEASILAQSYKKHITTVKBLKAAYVLVLPHQILLEYADRDGDRAHNFEESETSKK
 6006737_Giardia_intestinalis MEVMNSLVNDLFERIASSEANSLNARSKRNTIGKDIIESAKLIPGEICRLIRDEADKALSKFTSKEST
 6165652_Leishmania_major MKIVNSLVNDLFERIASSEANSLNARSKRNTIGKDIIESAKLIPGEICRLIRDEADKALSKFTSKEST
 13384083_Leishmania_major MKIVNSLVNDLFERIASSEANSLNARSKRNTIGKDIIESAKLIPGEICRLIRDEADKALSKFTSKEST
 2143266_Leishmania_infantum MKIVNSLVNDLFERIASSEANSLNARSKRNTIGKDIIESAKLIPGEICRLIRDEADKALSKFTSKEST
 6165654_Leishmania_major MKIVNSLVNDLFERIASSEANSLNARSKRNTIGKDIIESAKLIPGEICRLIRDEADKALSKFTSKEST
 122056_Leishmania_enriettii MKIVNSLVNDLFERIASSEANSLNARSKRNTIGKDIIESAKLIPGEICRLIRDEADKALSKFTSKEST
 3819712_Trypanosoma_brucei MKIVNSLVNDLFERIASSEANSLNARSKRNTIGKDIIESAKLIPGEICRLIRDEADKALSKFTSKEST
 10613_Trypanosoma_cruzi MKIVNSLVNDLFERIASSEANSLNARSKRNTIGKDIIESAKLIPGEICRLIRDEADKALSKFTSKEST
 12838850_Mus_musculus 12838850_Mus_musculus MKIVNSLVNDLFERIASSEANSLNARSKRNTIGKDIIESAKLIPGEICRLIRDEADKALSKFTSKEST
 556610_Plasmadium_falciparum 556610_Plasmodium_falciparum MNIMNSFVNDLFERIATEASRLCKVTRDITLSSREIQTAVRLLPGEELAKHAVAEGTKAVVSKMSR---SK-
 4138413_Plasmodium_vivax MNIMNSFVNDLFERIATEASRLCKVTRDITLSSREIQTAVRLLPGEELAKHAVAEGTKAVVSKMSR---SK-
 6579213_Arabidopsis_thaliana 6579213_Arabidopsis_thaliana MTIVVNFMGDMFERIAQEAAEISLSDVTKRRLTSSREIEAAVRLVPGLSPHAVVEGSKAVSNFVGYDSRK
 70716_Bos_taurus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVSHASS---
 4504257_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVSHASS---
 4504267_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVSHASS---
 2119000_Mus_musculus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVSHASS---
 122016_Mus_musculus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVSHASS---
 4504259_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVSHASS---
 477676_Rattus_norvegicus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 56346_Rattus_norvegicus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 556310_Mus_musculus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 2119001_Mus_musculus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 13386452_Mus_musculus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 10800140_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 4504263_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 4504273_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 4504261_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 10800138_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 13644984_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 11036646_Homo_sapiens MGIMNSFVNDLFERIATEASRLPHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 4504269_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 1458147_Mus_musculus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 3080466_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 13645045_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 4504275_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 4504277_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 12732560_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 1458141_Mus_musculus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 32113_Homo_sapiens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 63456_Gallus_gallus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 63445_Gallus_gallus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122049_Cairina_moschata MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
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 63450_Gallus_gallus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 104696_Gallus_gallus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 2696698_Gallus_gallus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 86303_Gallus_gallus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 86305_Gallus_gallus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 70717_Xenopus_laevis MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122023_Xenopus_laevis MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 422603_Xenopus_laevis MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 422604_Xenopus_laevis MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 70718_Xenopus_laevis MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122034_Xenopus_laevis MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 204605_Rattus_norvegicus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 57353_Rattus_norvegicus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 1518338_Mus_musculus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 70719_Salmo_trutta MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122060_Oncorhynchus_mykiss MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 70720_Oncorhynchus_mykiss MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 64322_Oncorhynchus_mykiss MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122044_Strongylocentrotus_purp MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 7439719_Strongylocentrotus_purp MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 161370_Psammechinus_miliaris MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122043_Strongylocentrotus_purp MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122062_Urechis_caupo MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122059_Platynereis_dumerilii MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 70726_Patella_granatina MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 2564106_Chaetopterus_variopeda MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 4033694_Sipunculus_nudus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 161357_Psammechinus_miliaris MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122040_Psammechinus_miliaris MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122057_Marthasterias_glacialis MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122047_Asterias_rubens MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 7439713_Asterina_pectinifera MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 1870698_Psammechinus_miliaris MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 161366_Psammechinus_miliaris MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 70737_Parechinus_angulosus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122020_Strongylocentrotus_purp MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122029_Parechinus_angulosus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---
 122037_Parechinus_angulosus MGIMNSFVNDLFERIATEASRLAHYNKRSTITSREIQTAVRLLPGEELAKHAVAEGTKAVVTSK---

729673_Lytechinus_pictus
 70736_Strongylocentrotus_purpu
 1346252_Holothuria_tubulosa
 462238_Tigriopus_californicus
 462237_Tigriopus_californicus
 103049_Drosophila_hydei
 122054_Drosophila_melanogaster
 103048_Drosophila_hydei
 14269422_Rhynchosciara_americana
 6686553_Asellus_aquaticus
 122051_Chironomus_thummi_thumm
 283334_Anopheles_gambiae
 7505381_Caenorhabditis_elegans
 3879733_Caenorhabditis_elegans
 6755_Caenorhabditis_elegans
 7494633_Caenorhabditis_elegans
 7497775_Caenorhabditis_elegans
 122048_Caenorhabditis_elegans
 1458314_Caenorhabditis_elegans
 122030_Psammechinus_miliaris
 70722_Psammechinus_miliaris
 122042_Strongylocentrotus_purpu
 10252_Strongylocentrotus_purpu
 70723_Strongylocentrotus_purpu
 122018_Psammechinus_miliaris
 70721_Psammechinus_miliaris
 462239_Acropora_formosa
 3821328_Schizosaccharomyces_po
 173405_Schizosaccharomyces_pom
 6319471_Saccharomyces_cerevisi
 532748_Saccharomyces_cerevisia
 529959_Emericella_nidulans
 122046_Emericella_nidulans
 2495140_Agaricus_bisporus
 4583669_Guillardia_theta
 627080_Tetrahymena_pyrimorfis
 578564_Tetrahymena_thermophila
 578563_Tetrahymena_thermophila
 2149888_Euplates_crassus
 1708106_Chlamydomonas_reinhard
 1708105_Chlamydomonas_reinhard
 1708103_Chlamydomonas_reinhard
 2118996_Chlamydomonas_reinhard
 99439_Volvoplanteae
 122039_Volvoplanteae
 22323_Zea_mays
 3913804_Zea_mays
 22325_Zea_mays
 473605_Zea_mays
 122022_Triticum_aestivum
 7439750_Zea_mays
 13872898_Oryza_sativa
 13872901_Oryza_sativa
 13872940_Oryza_sativa
 9663989_Oryza_sativa
 13872950_Oryza_sativa
 13872944_Oryza_sativa
 9663991_Oryza_sativa
 531056_Triticum_aestivum
 1362185_Triticum_aestivum
 1362186_Triticum_aestivum
 1362184_Triticum_aestivum
 122033_Triticum_aestivum
 6682228_Arabidopsis_thaliana
 11275241_Arabidopsis_thaliana
 6729516_Arabidopsis_thaliana
 4056497_Arabidopsis_thaliana
 7635498_Cicer_arietinum
 3021485_Lycopersicon_esculentu
 2558962_Gossypium_hirsutum
 13272409_Arabidopsis_thaliana
 7439756_Lycopersicon_esculentu
 7387727_Capsicum_annuum
 7439753_Lycopersicon_esculentu
 9757912_Arabidopsis_thaliana
 7339499_Arabidopsis_thaliana
 7630031_Arabidopsis_thaliana
 12083300_Arabidopsis_thaliana
 10177235_Arabidopsis_thaliana
 1617013_Arabidopsis_thaliana
 7387729_Nicotiana_tabacum
 1199969_Allium_cepa
 563329_Asparagus_officinalis
 Consensus/80%

htlhstals-la-+lts-tt+lt+as++sslst+-lpst1+llst-lt+tlt-ts+tls+asst.....

4379066_Homo_sapiens	-----
4379067_Homo_sapiens	-----
6706209_Homo_sapiens	SGAPEHHGNPKGLFRATECGLKDQWLAKGDTTGGW
12839345_Mus_musculus	-----
2350887_Entamoeba_histolytica	-----
729675_Entamoeba_invadens	-----
8096190_Lilium_longiflorum	NSQGRKRGQQT
6006737_Giardia_intestinalis	KK-----
6165652_Leishmania_major	-----
13384083_Leishmania_major	-----
2143266_Leishmania_infantum	-----
6165654_Leishmania_major	-----
122056_Leishmania_enriettii	-----
3819712_Trypanosoma_brucei	-----
10613_Trypanosoma_cruzi	-----
12838850_Mus_musculus	-----
556610_Plasmadium_falciparum	-----
4138413_Plasmodium_vivax	-----
6579213_Arabidopsis_thaliana	R-----
70716_Bos_taurus	-----
4504257_Homo_sapiens	-----
4504267_Homo_sapiens	-----
2119000_Mus_musculus	-----
122016_Mus_musculus	-----
4504259_Homo_sapiens	-----
477676_Rattus_norvegicus	-----
56346_Rattus_norvegicus	-----
556310_Mus_musculus	NKFYYLPSF-----
2119001_Mus_musculus	-----
13386452_Mus_musculus	-----
10800140_Homo_sapiens	-----
4504263_Homo_sapiens	-----
4504273_Homo_sapiens	-----
4504261_Homo_sapiens	-----
10800138_Homo_sapiens	-----
13644984_Homo_sapiens	-----
11036646_Homo_sapiens	-----
4504269_Homo_sapiens	-----
1458147_Mus_musculus	-----
3080466_Homo_sapiens	-----
13645045_Homo_sapiens	-----
4504275_Homo_sapiens	-----
4504277_Homo_sapiens	-----
12732560_Homo_sapiens	-----
1458141_Mus_musculus	-----
32113_Homo_sapiens	-----
63456_Gallus_gallus	-----
63440_Gallus_gallus	-----
122049_Cairina_moschata	-----
63454_Gallus_gallus	-----
63450_Gallus_gallus	-----
104696_Gallus_gallus	-----
2696698_Gallus_gallus	-----
86303_Gallus_gallus	-----
86305_Gallus_gallus	-----
70717_Xenopus_laevis	-----
122023_Xenopus_laevis	-----
422603_Xenopus_laevis	-----
422604_Xenopus_laevis	-----
70718_Xenopus_laevis	-----
122034_Xenopus_laevis	-----
204605_Rattus_norvegicus	-----
57353_Rattus_norvegicus	-----
1518338_Mus_musculus	-----
70719_Salmo_trutta	-----
122060_Oncorhynchus_mykiss	-----
70720_Oncorhynchus_mykiss	-----
64322_Oncorhynchus_mykiss	-----
122044_Strongylocentrotus_purp	-----
7439719_Strongylocentrotus_pur	-----
161370_Psammechinus_miliaris	-----
122043_Strongylocentrotus_purp	-----
122062_Urechis_caupo	-----
122059_Platynereis_dumerilii	-----
70726_Patella_granatina	-----
2564106_Chaetopterus_variopeda	-----
4033694_Sipunculus_nudus	-----
161357_Psammechinus_miliaris	-----
122040_Psammechinus_miliaris	-----
122057_Marthasterias_glacialis	-----
122047_Asterias_rubens	-----
7439713_Asterina_pectinifera	-----
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99439_Volvox_carteri -----
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